lata, n. sp.!' " that this name is perfectly logical and must be upheld; and, further, concerning Ridley and Dendy's *Iophon Pattersoni*, that whatever may be the real name of this comprehensive species, it certainly cannot be "*Iophon Pattersoni*, Bowerbank"!

Mr. Dendy cites the name of another of my species, and criticizes it as "beyond comment." I regret that my mental faculties are so feeble that I cannot see even the slightest objection to it!

Mr. Dendy enters a protest against the "free-and-easy system of nomenclature" used by me. It is not necessary to waste any words on such a phrase; but I must enter a protest against the cramped and illogical, although easier, method employed by Mr. Dendy.

I have been able to meet all Mr. Dendy's objections in the same objective and friendly manner in which no doubt they were meant, however forcible Mr. Dendy's language may be.

There is, however, one assertion which I am sorry to say cannot be viewed in this light. Mr. Dendy says (p. 336) that by my method I was "as it were capturing all stray species and taking forcible possession of them." Trusting that Mr. Dendy will regret the wording of that passage, I feel that it is incumbent on me to express my thanks to him for exposing the mistakes contained in my paper, and for showing me on what points a clearer expression of my views was desirable.

LXIII.—*Descriptions of six new Species of Butterflies captured by Mr. John Whitehead at Kina Balu Mountain, North Borneo, in the Collection of Mr. H. Grose Smith.* By H. Grose Smith.

Papilio acheron.

Male.—Upperside. Both wings bluish black, slightly suffused with purple; margins between the nervures narrowly white; the posterior wings slightly irrorated with grey in the anal area.

Underside. Both wings with markings as in my *P. Forbesi*, except that the grey rays between the nervules on the anterior wings are less marked, the ochraceous band on the posterior wings does not extend beyond the upper median nervule, and the three blue spots near the exterior margin between the costal nervure and the discoidal nervule are less

distinct; the white spots on the margins between the nervules are much narrower.

Expanse of wings 4 inches.

Nearest to *P. Forbesi.*

Papilio stratiotes.

Male.—Upperside. White, tinged at the base with pale greenish yellow. Anterior wings with the costal margin and cell crossed by four black fasciæ; the basal fascia narrow, the second, third, and fourth wedge-shaped, the fourth extending beyond the discocellular nervules; beyond the fourth fascia is a semitransparent space divided by the discoidal nervules, which are black; apex broadly black, centred with another transparent space, divided by the black nervules. Posterior wings with exterior margins narrowly black and three black lunate spots near the anal angle; anal area grey, a large bright, quadrangular, carmine spot at the anal angle, bordered on the upperside with black and on the inside on the inner margin with a white linear spot. Tails narrow and black, with white margins.

Underside. Anterior wings as above, tinged at the base with yellowish brown. Posterior wings ochraceous, crossed at the middle and near the base by two black bands, slightly convergent towards the anal angle and extending as far as the greyish-black space above the anal carmine spot; the exterior margin and anal area broadly black, irrorated towards the anal angle with grey, the carmine spot as above, the discocellular and median nervules black; two small black spots below the former.

Expanse of wings $3\frac{3}{4}$ inches.

This insect appears to be intermediate between *P. antiphates*, Cramer, and *P. agetes*, Westwood; in shape and markings of the upperside it approaches *P. agetes*, on the underside it bears a superficial resemblance to *P. antiphates.*

Papilio procles.

Near to *P. bathycles*, Zink., but differs from it in the following respects:—Anterior wings: upperside, four spots only in the cell, the second and third being almost obsolete; the three lowest spots of the discal row of spots confluent and broader than in *P. bathycles.* On the posterior wings the three discal spots are larger and confluent, instead of being distinct, and the wings are more deeply emarginate. On the underside of posterior wings the large silvery patch is not traversed near

the centre by a concave brown fascia, as in *P. bathycles*, but in lieu of it there is a short, narrow, brown fascia from the costa nearly as far as the subcostal nervure, almost divided on the costal nervure by a small orange-red spot, and there is a small triangular silvery spot next the cell between the upper and second discocellular nervules. The dark brown area in which the series of orange-red spots towards the anal angle is situated is broader than in *P. bathycles*, and the submarginal row of spots is further from the margin.

Expanse of wings $2\frac{1}{2}$ inches.

Papilio macaristus.

Near to *P. macareus*, Godart, but differs from it in the following respects:—Anterior wings: upperside, in place of the double row of three spots and three short bars in the space between the end of the cell and the upper part of the submarginal row of spots, there are three elongated streaks, slightly clavate at the ends nearest the cell. On the posterior wings the streaks in the area between the cell and the exterior margin are very short and narrow. Underneath, all the streaks on the posterior wings are very indistinct, some being almost obsolete, while in *P. macareus* they are quite as large and distinct as on the upperside; the body is black, with a narrow grey stripe on each side. Two specimens of *P. macareus* in my collection from Sumatra have bright brown bodies, and two others from Darjeeling have black bodies broadly striped with grey.

I should have been disposed to look upon this insect as a variety only of *P. macareus* if there had not been in the collection a uniform series of it from the same locality.

Expanse of wings $3\frac{1}{2}$ inches.

Appias Whiteheadi.

Male. Above, approximates to *A. pandione*, Hübn., but on the anterior wings the apical area is more extensively black, and in place of the large subquadrate black spot at the end of the cell of *A. pandione*, which is contiguous with the greyish-black costal area, there is a small black spot quite distinct. The second submarginal white spot in the middle of the apical area is almost obsolete. On the posterior wings the black margin is double the width of that of *A. pandione*, extending over the exterior third of the wings. Below, it differs from *A. pandione* on the anterior wings in the spot at the end of the cell being very small and distinct, and the apex being pinkish grey. On the posterior wings the basal third is light

ochraceous, very slightly irrorated with grey towards the base; the remainder of the wings pinkish grey, crossed with an indistinct irregular dark band, bordered externally towards the apex with pale pinkish grey; the spot at the end of the cell is bright ochraceous.

Expanse of wings $2\frac{5}{8}$ inches.

Ragadia annulata.

Upperside. Both wings stramineous, with the band, costal margin of anterior wings, and exterior margin of both wings broadly ashy brown, crossed near the apex as far as the first median nervule by an ashy-brown bar; beyond that nervule the bar is discontinued on the upperside, but it shows through from the underside, where it is prolonged across both wings to the inner margin.

Underside. Anterior wings crossed by three ashy-brown bands, the submarginal band having eight ocelli; costal and outer margins ashy brown. Posterior wings with three bands, the middle band concave and the outer one with six ocelli, the second, third, and fourth being the largest. All the ocelli are black, with silver pupils, the iris ochraceous, the second and third on the posterior wing enclosed in one iris.

Expanse of wings $1\frac{1}{2}$ inch.

LXIV.—*On the Development of the Sexual Products in* Spongilla. By Karl Fiedler *.

Since Lieberkühn † in 1856 discovered both spermatozoa and ova in *Spongilla*, and thus for the first time demonstrated the presence of these important structures in the sponges, the history of their production has been treated of in a long series of spongological memoirs. The further development of the freshwater sponge has also been of late years repeatedly made the subject of investigation. The results

* Translated from a separate copy from the 'Zoologischer Anzeiger,' no. 266, 1887, communicated by the Author.

† N. Lieberkühn, "Beiträge zur Entwicklungsgeschichte der Spongillen," in Müller's Archiv für Anat. und Physiol. 1856, p. 17, and also "Zusätze zur Entwicklungsgeschichte der Spongillen," *ibid.* p. 501.